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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,341	06/14/2001	Noriyoshi Chizawa	1232-4723	7022

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NEW YORK, NY 10281-2101

EXAMINER
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GRANT II, JEROME

ART UNIT	PAPER NUMBER
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2625

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/27/2006	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Supplemental  
Office Action Summary**

Application No.

09/881,341

Applicant(s)

CHIZAWA, NORIYOSHI

Examiner

Jerome Grant II

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 4-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

JEROME GRANT  
PRIMARY EXAMINER

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_.

**Detailed Action**

1.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 19 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Youn.

With respect to claim 1, Youn teaches a processing apparatus 240 having a function of connecting to another apparatus 206, the processing apparatus comprising: a power unit 202 adapted to connect to a power supply (AC POWER); a power circuit 206 adapted to provide power to each part of the processing apparatus 210; a switch 204 adapted to exclusively connect or disconnect to the power input unit and the power circuit 206; wherein the power is supplied to the power circuit from the power input unit through the switch; and a power controller 208 adapted to control said switch on the basis of an instruction given by the other apparatus 206, wherein the power controller 208 is configured to operate by using electric power from the other apparatus.

With respect to claim 19, Youn teaches:

A processing apparatus having a function of connecting to a processing device 208, 210, the processing device including: a power input unit 202 adapted to connect a power supply AC Power; a power circuit 206 adapted to provide power to each part of the processing device 208, 210; a switch 204 adapted to connect or disconnect the power input unit 202 and the power circuit 206; wherein the power is supplied to the power circuit from the power input unit through the switch (see figure 2); and a power controller (208) adapted to control the switch, the processing apparatus comprising: a controller (which is comprised of: DS, R2, R3, C2 and SW, see figure 2); to provide power controller 208 of the processing device, and giving instruction to control the switch to the power controller which is operable with power supplied from (D2, R2, R3, C1 and SW).

With respect to claim 23, Youn teaches a processing system in which first and second processes are connected. The first process apparatus is a power input unit 202 adapted to a power supply (AC Power); the second process apparatus a power circuit 206 adapted to provide power to each part of the processing apparatus 210; a switch 204 adapted to connect or disconnect to the power input unit and the power circuit 206; Youn teaches a power controller 208 which is configured to operate by using an electric power supplied from the second processing apparatus 206, and is configured to control said switch 204 on the basis of an instruction given by said second

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processing apparatus, and second processing apparatus 206, comprises a controller (R2, R3, C1 and SW) adapted to supply electric power to the first processing apparatus and provide instruction concerning the switch 204.

2.

Claims 18, and 22, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,526,516 B1 to Ishikawa et al. in view of U.S. Patent No. 5,812,386 to Youn.

Therefore, it would have been obvious to one having ordinary skill in the art to combine Youn's switching invention with Ishikawa et al.'s invention. The motivation of connecting other devices together using a single cable is to provide an easy way to connect devices together, and connector space required for each device is reduced as well as the cost of making the connections. The motivation of using a power switching circuit is to only provide power when needed; therefore it minimizes power consumption. So, the combined motivation is to effectively distribute power among a plurality of devices, and to reduce cost and connector space.

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Regarding claim 2, Youn's invention discloses an AC connector (Figure 2 Element AC POWER), and Ishikawa also discloses an AC power source (see Figure 1).

Regarding Claim 3, according to Ishikawa et al., their invention can also be achieved by storing program codes that perform the functions according to the embodiments, and reading them with a CPU, or MPU, and then executing the program (refer to Column 26 Lines 43-52). Therefore, it is quite simple for one having ordinary skill in the art to provide a storage medium inside the controller that contains program codes instructing the power controller to control the switch.

3.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 18, 19, 22 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Youn in view of Ishikawa.

Youn teaches all of the subject matter upon which the claims depend. See the rejection to claims 1 and 19.

What is not shown by the reference is that the other device claimed is an image output device.

While Youn speaks to power supply systems, Ishikawa is directed toward image output devices which employ power systems.

Therefore, it would have been obvious to one of ordinary skill in the art to modify or replace the AC adapter of Ishikawa with the power system shown by figure 2 of Youn so that the power system, as modified by Youn, is designed to be connected to an output device 117 of Ishikawa for the purpose of providing power to an output image device for generating the image data supplied to the output device.

Regarding claims 18 and 22, Ishikawa et al. disclose an image output unit (Figure 1 Element 117).

Regarding claim 19, Ishikawa et al. disclose an image processing apparatus (see Figure 1, Element 109) that connects to another image processing apparatus (see Figure 1 Element 117) through a single cable (refer to Column 2 Lines 60-61). The image processing apparatus (Figure 1 Element 109) is getting its power from the other image processing apparatus (Figure 1 Element 117, and Column 5 Lines 49-52). However, Ishikawa et al. do not disclose a switch that is used to connect or disconnect a power input and a power circuitry

Youn, on the other hand, discloses a switch (see Figure 2 Element 204 Transistor TR) that is used to connect or disconnect a power input (see Figure 2 Element AC POWER) and a power circuitry (see Figure 2 Element 202). The Power Controller (Figure 2 Element 208) controls the switch TR.

Therefore, it would have been obvious to one having ordinary skill in the art to combine Youn's switching invention with Ishikawa et al.'s invention. The motivation of connecting other devices together using a single cable is to provide an easy way to connect devices together, and connector space required for each device is reduced as well as the cost of making the connections. The motivation of using a power switching circuit is to only provide power when needed; therefore it minimizes power consumption. So, the combined motivation is to effectively distribute power among a plurality of devices, and to reduce cost and connector space.

Regarding claim 24, Youn teaches all of the subject matter upon which the claim depends except for the image reader as claimed. However, Ishikawa discloses an image reader (Figure 1 Element 109) as the first image processing apparatus, and an image output device (Figure 1 Element 117) as the second image processing apparatus.

While Youn speaks to power supply systems, Ishikawa is directed toward image output devices which employ power systems.



Therefore, it would have been obvious to one of ordinary skill in the art to modify or replace the AC adapter of Ishikawa with the power system shown by figure 2 of Youn so that the power system, as modified by Youn, is designed to be connected to an output device 117 and image reading 109 both illustrated by figure 1 of Ishikawa for the purpose of providing power to an output image device for generating the image data supplied to the output device.

4.

Claims 4-11, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,812,386 to Youn in view of U.S. Patent No. 6,526,516 B1 to Ishikawa as applied to Claim 1, above, and further in view of U.S. Patent Publication No. US 200210126516 A1 to Jeon.

Regarding claim 4, Ishikawa et al. and Youn do not disclose the use of a main controller in their inventions.

However, Jeon discloses the use of the Main Control Unit (see Figure 1 Element 14).

According to Ishikawa et al.; their invention can also be achieved by storing program codes that perform the functions according to the embodiments, and reading them with a CPU, or MPU, and then executing the program (refer to Column 26 Lines 43-52). Therefore, it would have been obvious to one having ordinary skill in the art to provide a storage medium inside the Main Control Unit of Jeon's invention that contains program codes instructing the power controller to control the switch. The motivation to do so is to provide a centralized method of controlling power.

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Regarding claim 5, this claim is essentially a combination of Claim 3 (canceled) and 4.

Therefore, it is rejected on the same basis as the rejections of Claims 3 and 4 above.

Regarding claim 6, one having ordinary skill in the art clearly can combine Ishikawa et al.'s invention and Youn's invention, and also integrate the Main Control Unit of Jeon's invention in such a way that the Main Control Unit operates by using electric power supplied from the power circuit. The motivation to do so is to have a simple design by just having one power circuit providing power to multiple devices.

Regarding Claim 7, Ishikawa et al. disclose the power controller that controls a switch (Figure 9 Element 13, Figure 13 Element 42, Figure 14 Element 53), and the other apparatus (Figure 1 Element 117) instructs the power controller to do so via Elements 111 and 110 of Figure 1.

Regarding claims 8 and 9, one having ordinary skill in the art can modify Jeon's Main Control Unit (Figure 1 Element 14) to include the notifying function. According to Jeon, the Main Control Unit can check whether the function-performing unit finishes a predetermined function or still performs the predetermined function (Paragraph [0028] Lines 6-9). It is possible for one having ordinary skill in the art to modify the Main Control Unit of Jeon's invention to check for two additional conditions. The two additional conditions are. a condition of which a predetermined operation or function is executable, and a condition of which a predetermined operation or function is not executable after a predetermined time period (refer to Paragraph (0029] Lines 1-4). The Main Control Unit will notify the other apparatus of the result of the checking. The motivation to do so is to provide a centralized and systematic way of controlling multiple devices or components, and reduce power consumption.

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Regarding claims 10, 11, 20 and 21, it is clear (see the rejections of Claims 8 and 9 above) that one having ordinary skill in the art can add checking functionality to Jeon's Main Control Unit in such a way that it can check whether a particular device (the other apparatus, or the other image processing apparatus) is able to execute a predetermined function or operation, or not able to execute a predetermined function or operation after a predetermined time period (refer to Jeon's Publication, Paragraph [0029] Lines 1-4). The power controller can simply close (connect) the switch if the other apparatus, or the other image processing apparatus is able to execute a predetermined function or operation, and it can simply open (disconnect) the switch if the other apparatus, or the other image processing apparatus is not able to execute a predetermined function or operation. The motivation to do so is to 'provide a centralized and systematic way of controlling multiple devices or components, and reduce power consumption.

5.

Claims 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,812,386 to Youn further in view of U.S. Patent No. 6,526,516 B1 to Ishikawa et al. as applied to Claim 1 above, and further in view of U.S. Patent Publication No. US 6,334,719 B1 to Kimura.

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Regarding Claim 12, Ishikawa et al. and Youn do not disclose the use of sensors in their inventions.

However, Kimura discloses the use of sensors arranged at various locations within a device to sense the state of the device (refer to Column 3 Lines 29-35). Therefore, it would have been obvious to one having ordinary skill in the art to use a sensor as taught by Kimura to sense a specific state of a device, and then control the switch according to the result of the sensor. The motivation to do so is to provide a feedback control system that would detect errors automatically. Also, such a sensor can be used (as in Kimura) as part of a power saving system to detect when a document is present (refer to Column 2 Lines 2045, and Figures 3 and 4).

Regarding Claim 13, Youn and Ishikawa et al. do not disclose the use of sensors in their inventions, but Ishikawa discloses the use of an image reader (Figure 1 Element 101). However, Kimura discloses both the image reader (Figure 1 Element 2) and the use of sensors (Figure 1 Elements 25, 26, 27) associated with the image reader. Therefore it would have been obvious to one having ordinary skill in the art to use the document sensor (Figure 1 Element 25) for starting the image read operation, and have the output of the sensor connected to the input of the power controller to control the switch. The motivation to do so is to provide an automatic power control system capable of reducing power consumption. When the document is absent, the switch is not turned on, and therefore power consumption is reduced.

Regarding Claim 14, Ishikawa et al.'s invention is capable of providing power to other devices and components. Therefore, it would have been obvious to one having ordinary skill in the art to use Ishikawa et al.'s invention to provide electric power to the sensor.

Regarding Claim 15, Kimura discloses the image reader (Figure 1 Element 2), which includes a cover plate that is not shown (refer to Column 3 Lines 35-36). The image reader also includes an automatic document feeder (Figure 1 Element 24). The cover plate sensor (Figure 1 Element 27) senses opening/closure of the cover plate and the automatic document feeder (refer to Column 3 Lines 34-36).

Regarding Claim 16, Kimura discloses the image reader (Figure 1 Element 2) comprises a glass platen (Figure 1 Element 10), and a document sensor (Figure 1 Element 26), which senses that an original is placed on the glass platen (refer to Column 3 Lines 33-34).

Regarding Claim 17, Kimura discloses the image reader (Figure 1 Element 2) comprises an automatic document feeder (Figure 1 Element 24), and a document sensor (Figure 1 Element 25), which senses that an original is placed on the feeder (refer to Column 3, lines 31-32).

6.

**Examiner's Remarks**

Applicant contends that Youn fails to teach:

“...wherein the power is supplied to said power circuit from the said power input unit exclusively through said switch.”

The examiner has identified element 204 as the switch. Applicant has provided two main pieces of evidence as support that 204 is not the switch for providing the exclusive switching function as claimed.

However, the examiner traverses the evidence as will be explained below.

First applicant contends that switch 204 does not function exclusively, as stated beginning at line 4 of page 10, “.. Thus, even when the power switching circuit 204 is not activated, AC power is intermittently supplied to the AC-DC converter 206 through the thyristor SCR. The examiner does find any support for this contention, and applicant has not referred a column or line number in Youn to support this contention. The examiner opines that col. 2, lines 32-35 actually teaches the opposite. Namely, when switch 204 is inoperable it switches off power to converter 206. Therefore, the examiner does not agree with applicant's analysis according to page 10 lines 1-11 of the Remarks.

Secondly, in the first full paragraph of page 10, applicant contends that Youn has two switches, the first being a relay RL and the second, a thyristor SCR. However, the examiner

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never identified these elements as the switch. The applicant has identified these elements as switches. The examiner identified element 204 as the switch. Therefore, the thyristor is not a part of the switch identified by the examiner. So applicant's analysis as to why the thyristor is not exclusive, is not persuasive.

7.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jerome Grant II whose telephone number is 571-272-7463. The examiner can normally be reached on Mon.-Thurs. from 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on Mon.-Thurs at 571-272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



JEROME GRANT  
PRIMARY EXAMINER

J. Grant II